

PATENT COOPERATION TREATY

From the
INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY



To:

STRÖM & GULLIKSSON IPC AB
P.O. Box 4188
S-203 13 Malmö
SUEDE

NOTIFICATION OF TRANSMITTAL OF THE INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Rule 71.1)

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2005-02-04

Date of mailing
(day/month/year)

02.02.2005

Applicant's or agent's file reference
W 5039-006 EK

Ström & Gulliksson
Malmö

IMPORTANT NOTIFICATION

International application No.
PCT/EP 03/09207

International filing date (day/month/year)
20.08.2003

Priority date (day/month/year)
30.09.2002

Applicant

SONY ERICSSON MOBILE COMMUNICATIONS AB et al.

1. The applicant is hereby notified that this International Preliminary Examining Authority transmits herewith the international preliminary examination report and its annexes, if any, established on the international application.
2. A copy of the report and its annexes, if any, is being transmitted to the International Bureau for communication to all the elected Offices.
3. Where required by any of the elected Offices, the International Bureau will prepare an English translation of the report (but not of any annexes) and will transmit such translation to those Offices.

4. REMINDER

The applicant must enter the national phase before each elected Office by performing certain acts (filing translations and paying national fees) within 30 months from the priority date (or later in some Offices) (Article 39(1)) (see also the reminder sent by the International Bureau with Form PCT/IB/301).

Where a translation of the international application must be furnished to an elected Office, that translation must contain a translation of any annexes to the international preliminary examination report. It is the applicant's responsibility to prepare and furnish such translation directly to each elected Office concerned.

For further details on the applicable time limits and requirements of the elected Offices, see Volume II of the PCT Applicant's Guide.

The applicant's attention is drawn to Article 33(5), which provides that the criteria of novelty, inventive step and industrial applicability described in Article 33(2) to (4) merely serve the purposes of international preliminary examination and that "any Contracting State may apply additional or different criteria for the purposes of deciding whether, in that State, the claimed inventions is patentable or not" (see also Article 27(5)). Such additional criteria may relate, for example, to exemptions from patentability, requirements for enabling disclosure, clarity and support for the claims.

FRIST 2005-03-02 rapport

Name and mailing address of the international preliminary examining authority:



European Patent Office
D-80298 Munich
Tel. +49 89 2399 - 0 Tx: 523656 epmu d
Fax: +49 89 2399 - 4465

Authorized Officer

Schalinatus, D

Tel. +49 89 2399-8242



PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

REC'D 03 FEB 2005

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Applicant's or agent's file reference W 5039-006 EK		FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/EP 03/09207	International filing date (day/month/year) 20.08.2003	Priority date (day/month/year) 30.09.2002	
International Patent Classification (IPC) or both national classification and IPC H04N5/225			
Applicant SONY ERICSSON MOBILE COMMUNICATIONS AB et al.			

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.
2. This REPORT consists of a total of 6 sheets, including this cover sheet.

☒ This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

 These annexes consist of a total of 3 sheets.

3. This report contains indications relating to the following items:
 - I ☒ Basis of the opinion
 - II ☐ Priority
 - III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
 - IV ☐ Lack of unity of invention
 - V ☒ Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
 - VI ☐ Certain documents cited
 - VII ☐ Certain defects in the international application
 - VIII ☐ Certain observations on the international application

Date of submission of the demand 12.03.2004	Date of completion of this report 02.02.2005
Name and mailing address of the international preliminary examining authority:  European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465	Authorized Officer Horstmannshoff, J Telephone No. +49 89 2399-6961 

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT**

International application No. **PCT/EP 03/09207**

I. Basis of the report

1. With regard to the **elements** of the international application (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17)*):

Description, Pages

1-15 as originally filed

Claims, Numbers

1-15 received on 16.10.2004 with letter of 16.10.2004

Drawings, Sheets

1/4-4/4 as originally filed

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- ☐ the description, pages:
- ☐ the claims, Nos.:
- ☐ the drawings, sheets:

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT**

International application No. **PCT/EP 03/09207**

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)).

(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)

6. Additional observations, if necessary:

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes: Claims	1-8,10-15
	No: Claims	9
Inventive step (IS)	Yes: Claims	1-8,10-15
	No: Claims	9
Industrial applicability (IA)	Yes: Claims	1-15
	No: Claims	

2. Citations and explanations

see separate sheet

V. Reasoned Statement under Article 35(2) with regard to novelty, inventive step and industrial applicability; citations and explanations supporting such statement

I

The following documents cited in the International Search Report have been considered in this report:

- D1: EP-A-1 111 919 (NIPPON ELECTRIC CO) 27 June 2001 (2001-06-27)
- D2: US-A-6 137 525 (CHOI HO-YOUNG ET AL) 24 October 2000 (2000-10-24)
- D3: US-A-5 491 507 (KURIYAMA HIROYUKI ET AL) 13 February 1996 (1996-02-13)

II

1. Independent Claim 1 fulfills the requirements of Articles 31 (2) PCT and Articles 31 (2) PCT with respect to novelty and inventive step:

Document D3 which is considered to be the closest prior art discloses a portable communication device comprising:

- two housing portions (see D3: figure 13, (49), (50))
- a rotary support member rotatably connecting both housing portions (see D3: figure 13, (51))
- an image producing apparatus (see D3: figure 13, (61))
- an optical input (see D3: figure 13, (61))

wherein the optical input and the image producing apparatus are both located within the rotary support member (see D3: column 15 lines 43-51).

The closest prior art D3 differs from the subject-matter of independent Claim 1 in that the image producing apparatus is located separate from the optical input in one of the housing portions and optically coupled to the optical input via an optical arrangement.

The technical effect of this difference is that the rotary support member does not need to comprise any camera electronics and therefore the design of the support member becomes less complex since less parts need to be accommodated.

Therefore, the objective technical problem to be solved by independent Claim 1 is to provide a portable communication apparatus including a camera according to document D3 with a less complex design of the rotary support member.

Document D1 discloses a portable communication device consisting of two housing portion with a rotary support member connecting them. The optical system of a camera function unit is accommodated in the rotary support member (see D1: paragraph 61).

Document D2 discloses a personal data communication device comprising a camera (see D2: column 5 lines 31-42, figures 11 and 12), wherein the optical input ("lens") and the image producing apparatus ("CCD") are integrated as separate subunits and connected by an optical arrangement ("reflective mirror" and "prism") in order to enable the usage of a smaller sized housing.

Neither document D1 nor D2 discloses that the image producing apparatus is located in a different casing than the optical input of the camera function unit. Furthermore, it is not considered obvious to arrive at this solution. Therefore, independent Claim 1 is inventive according to Article 31 (2) PCT.

3. The present application does not meet the criteria of Article 33(1) PCT, because the subject-matter of claim 9 is not new in the sense of Article 33(2) PCT. The document **D1** discloses in the wording of independent claim 9 (the references in parentheses applying to this document):

A portable communication apparatus comprising:

- A first housing portion and a second housing portion (figure 10: (1Y), (1X))
- A rotary support member rotatably connecting the first housing portion to the second housing portion (figure 10: (1Z))
- an image producing apparatus (figure 9: (13) - (15))
- an optical input for the image producing apparatus located in the support

member (figure 10: (2))

wherein the connection between the first housing portion and the rotary support member is fixed (figure 10, paragraph 82 lines 19-20: the rotary support ("hinge portion", 1d) is fixed to the first housing portion ("case", 1X)) and the optical input of the image producing apparatus is rotatably fixed relative to the first housing portion (figure 10, column 12 lines 3-6, paragraph 82 lines 19-23: optical input is part of the hinge portion 1Z which is rotatably fixed to the first housing ("case", 1X). Therefore, the optical input is rotatably fixed with respect to the first housing.).

Therefore, document D1 discloses all features of independent claim 9 which is consequently not novel according to Article 33 (2) PCT.

3. Dependent Claims 10 and 11 fulfill the requirements of Articles 31 (2) PCT and Articles 31 (2) PCT with respect to novelty and inventive step.

CLAIMS

1. A portable communication apparatus (1) comprising:

5 a first housing portion (2) and a second housing portion (3),

a rotary support member (6) rotatably connecting the first housing portion and the second housing portion,

10 an image producing apparatus (7),

an optical input (8) for the image producing apparatus located in the support member, characterized in that

the image producing apparatus (7) is located in
15 the first housing portion (2) or the second housing portion (3) of the portable communication apparatus (1), and,

an optical arrangement (11) extends an optical path (12) of the image producing apparatus from the
20 first housing portion or the second housing portion to the optical input (8) located in the rotary support member (6).

2. A portable communication apparatus (1)
25 according to claim 1, wherein the optical arrangement (11) comprises a prism (11a).

3. A portable communication apparatus (1)
according to any of claims 1 or 2, wherein the optical
30 arrangement (11) comprises a mirror (11b).

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4. A portable communication apparatus (1) according to any preceding claim, wherein the optical arrangement (11) comprises a light guide (11c).

5 5. A portable communication apparatus (1) according to any preceding claim, wherein the optical input (8) is aimed in a first direction when the communication apparatus (1) is in an open state, and in a second direction when the communication apparatus (1)
10 is in a closed state.

6. A portable communication apparatus (1) according to any preceding claim, wherein the image producing apparatus is a video camera.
15

7. A portable communication apparatus (1) according to any preceding claim, wherein the image producing apparatus is a still camera.

20 8. A portable communication apparatus (1) according to any preceding claim, wherein the portable communication apparatus is a mobile telephone.

25 9. A portable communication apparatus (1) comprising:

a first housing portion (2) and a second housing portion (3),

a rotary support member (6) rotatably connecting the first housing portion and the second
30 housing portion,

an image producing apparatus (7), and

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an optical input (8) for the image producing apparatus located in the support member, characterized in that

the connection between the first housing portion (2) and the rotary support member (6) is fixed, wherein the optical input (8) of the image producing apparatus (7) is rotatably fixed relative to the first housing portion.

10 10. A portable communication apparatus according to claim 9, wherein the image producing apparatus (7) is located in the first housing portion (2),

11. A portable communication apparatus
15 according to claim 9 or 10, wherein an optical arrangement (11) extends an optical path (12) of the image producing apparatus from the first housing portion to the optical input (8) in the rotary support member (6).

20 12. A portable communication apparatus (1) according to any of claims 9-11, wherein the optical arrangement (11) comprises a prism (11a).

25 13. A portable communication apparatus (1) according to any of claims 9-11, wherein the optical arrangement (11) comprises a mirror (11b).

30 14. A portable communication apparatus (1) according to any of claims 9-13, wherein the optical arrangement (11) comprises a light guide (11c).

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15. A portable communication apparatus (1)
according to any of claims 9-14, wherein the portable
communication apparatus is a mobile telephone.

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